

Amendments to Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-92. (Canceled).

93. (New) A pharmaceutical composition comprising a therapeutically effective amount of at least one chemotherapeutic agent and at least one immunoconjugate; wherein the immunoconjugate comprises at least one maytansinoid compound linked to a monoclonal antibody or fragment thereof; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by a cancer cell.

94. (New) The pharmaceutical composition of claim 93, wherein the chemotherapeutic agent is a taxane compound, an epothilone compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof.

95. (New) The pharmaceutical composition of claim 93, wherein the chemotherapeutic agent is a taxane compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof.

96. (New) The pharmaceutical composition of claim 93, wherein the chemotherapeutic agent is paclitaxel, docetaxel, epothilone A, epothilone B, epothilone C, epothilone D, epothilone E, epothilone F, cisplatin, carboplatin, oxaliplatin, irinotecan, 9-aminocamptothecin, or a mixture of two or more thereof.

97. (New) The pharmaceutical composition of claim 93, wherein the chemotherapeutic agent is paclitaxel, cisplatin, etoposide, docetaxel, topotecan, or a mixture of two or more thereof.

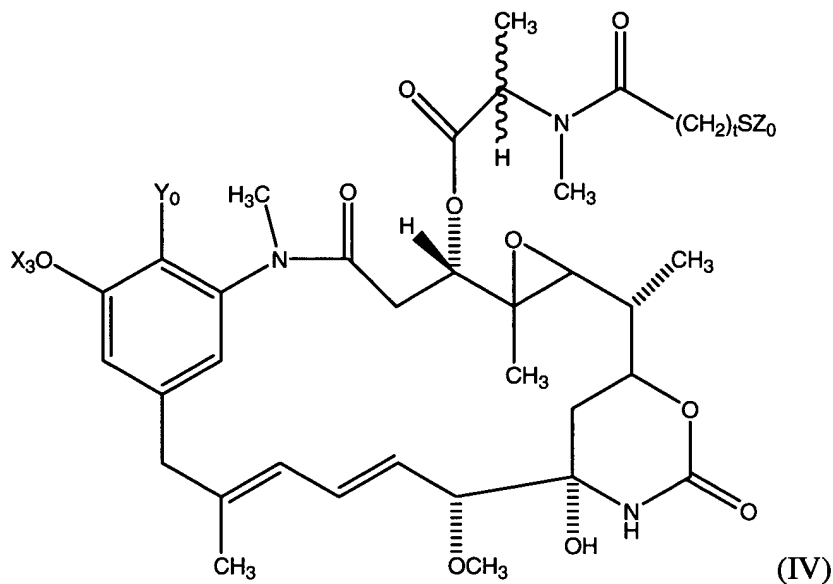
98. (New) The pharmaceutical composition of claim 93, wherein the monoclonal antibody or fragment thereof binds to a CD56 antigen.

99. (New) The pharmaceutical composition of claim 93, wherein the monoclonal antibody or fragment thereof is at least one of Fv, Fab, Fab' or F(ab')₂.

100. (New) The pharmaceutical composition of claim 93, wherein the monoclonal antibody or fragment thereof is humanized N901.

101. (New) The pharmaceutical composition of claim 93, wherein the monoclonal antibody or fragment thereof is humanized C242.

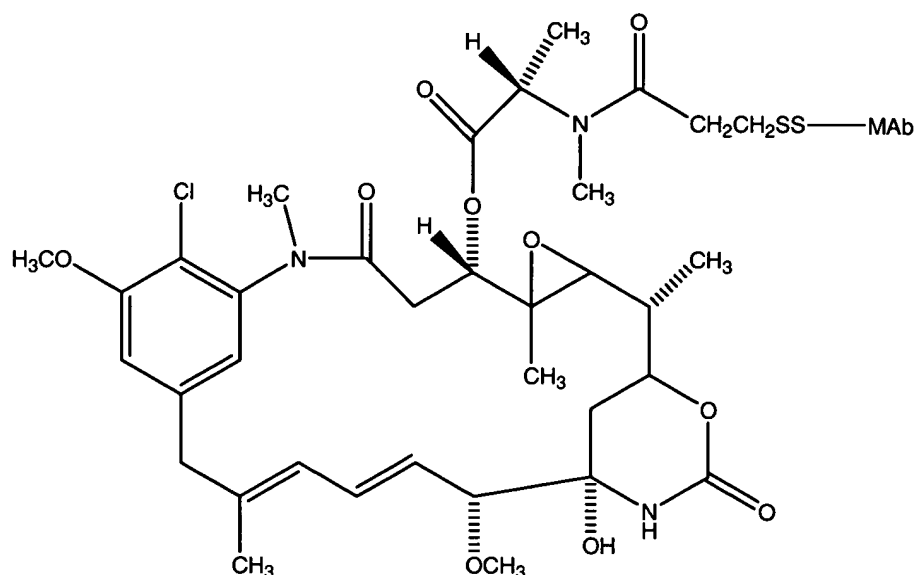
102. (New) The pharmaceutical composition of claim 93, wherein the immunoconjugate comprises at least one maytansinoid compound of formula (IV):



wherein Z_0 is H or SR; R is methyl, linear alkyl, branched alkyl, cyclic alkyl, simple or substituted aryl or heterocyclic; t is 1, 2 or 3; Y_0 is chlorine or hydrogen; and X_3 is hydrogen or methyl.

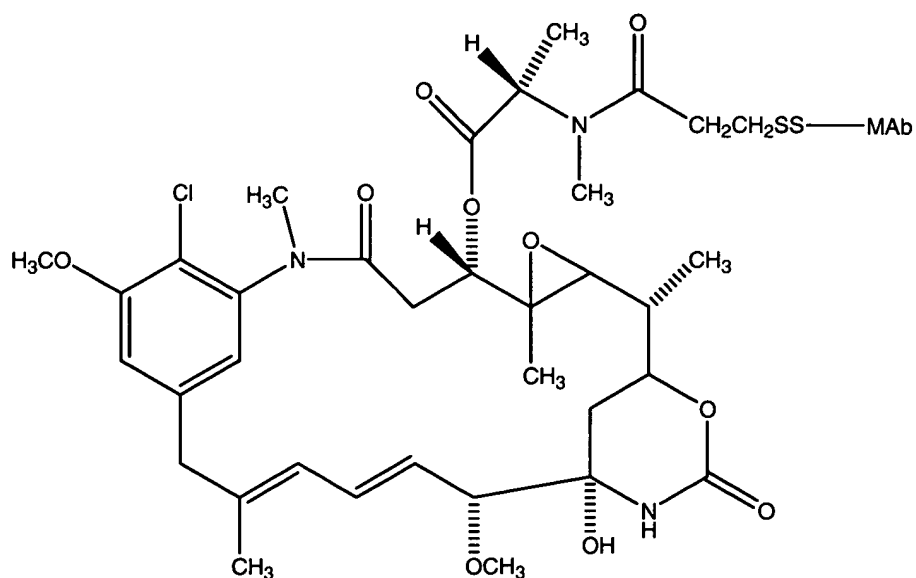
103. (New) The pharmaceutical composition of claim 102, wherein Z_0 is H; t is 2; Y_0 is chlorine; and X_3 is methyl.

104. (New) The pharmaceutical composition of claim 93, wherein the immunoconjugate is of the formula:



wherein MAb is a monoclonal antibody or fragment thereof that binds to an antigen expressed by the cancer cell.

105. (New) A pharmaceutical composition comprising a synergistic combination of at least one chemotherapeutic agent and at least one immunoconjugate; wherein the chemotherapeutic agent is a taxane compound, an epothilone compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof; and wherein the immunoconjugate is:



wherein MAb is a monoclonal antibody or fragment thereof that binds to an antigen expressed by a cancer cell.

106. (New) A kit comprising a therapeutically effective amount of at least one chemotherapeutic agent and a therapeutically effective amount of at least one immunoconjugate; wherein the immunoconjugate comprises at least one maytansinoid compound linked to a monoclonal antibody or fragment thereof; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by a cancer cell.

107. (New) The kit of claim 106, wherein the chemotherapeutic agent is a taxane compound, an epothilone compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof.

108. (New) The kit of claim 106, wherein the chemotherapeutic agent is a taxane compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof.

109. (New) The kit of claim 106, wherein the chemotherapeutic agent is paclitaxel, docetaxel, epothilone A, epothilone B, epothilone C, epothilone D, epothilone E, epothilone F, cisplatin, carboplatin, oxaliplatin, iproplatin, ormaplatin, tetraplatin, etoposide, teniposide, camptothecin, topotecan, irinotecan, 9-aminocamptothecin, or a mixture of two or more thereof.

110. (New) The kit of claim 106, wherein the chemotherapeutic agent is paclitaxel, cisplatin, etoposide, docetaxel, topotecan, or a mixture of two or more thereof.

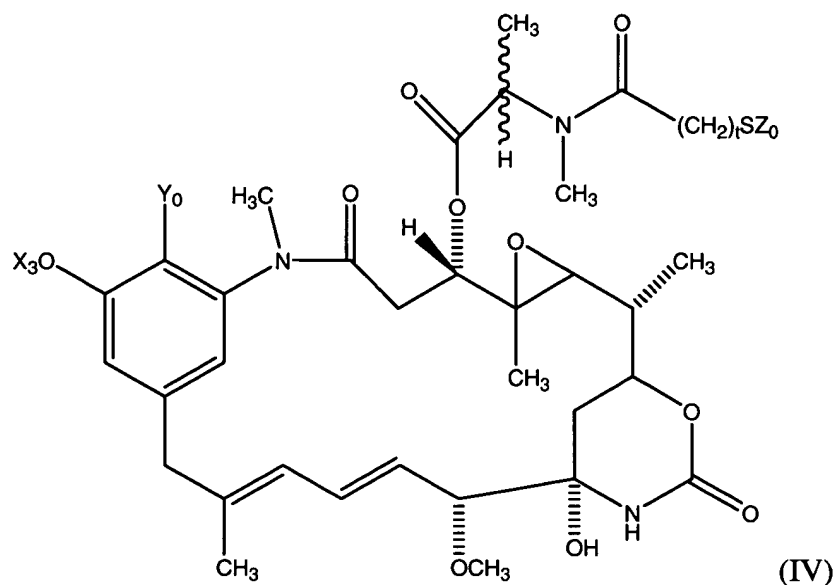
111. (New) The kit of claim 106, wherein the monoclonal antibody or fragment thereof binds to a CD56 antigen.

112. (New) The kit of claim 106, wherein the monoclonal antibody or fragment thereof is at least one of Fv, Fab, Fab' or F(ab')₂.

113. (New) The kit of claim 106, wherein the monoclonal antibody or fragment thereof is humanized N901.

114. (New) The kit of claim 106, wherein the monoclonal antibody or fragment thereof is humanized C242.

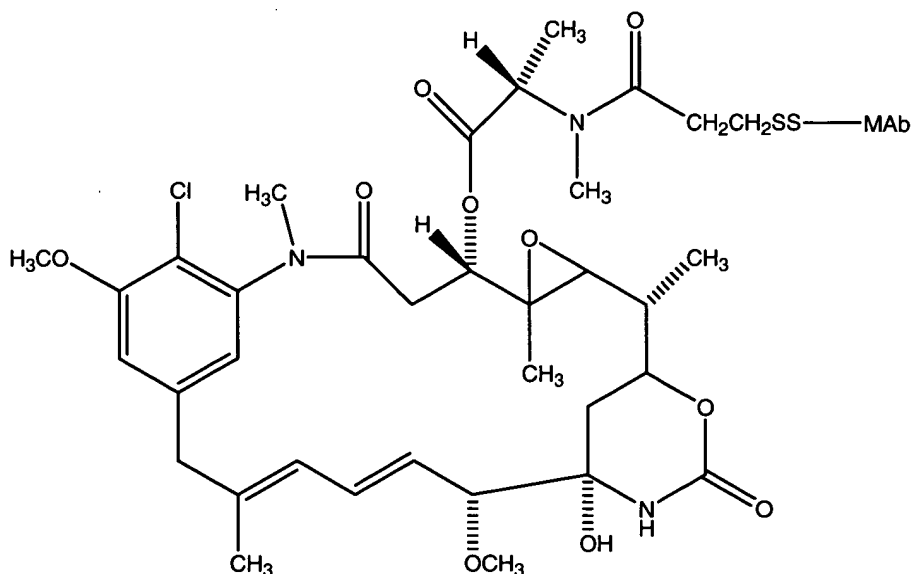
115. (New) The kit of claim 106, wherein the immunoconjugate comprises at least one maytansinoid compound of formula (IV):



wherein Z_0 is H or SR; R is methyl, linear alkyl, branched alkyl, cyclic alkyl, simple or substituted aryl or heterocyclic; t is 1, 2 or 3; Y_0 is chlorine or hydrogen; and X_3 is hydrogen or methyl.

116. (New) The kit of claim 115, wherein Z_0 is H; t is 2; Y_0 is chlorine; and X_3 is methyl.

117. (New) The kit of claim 106, wherein the immunoconjugate is:

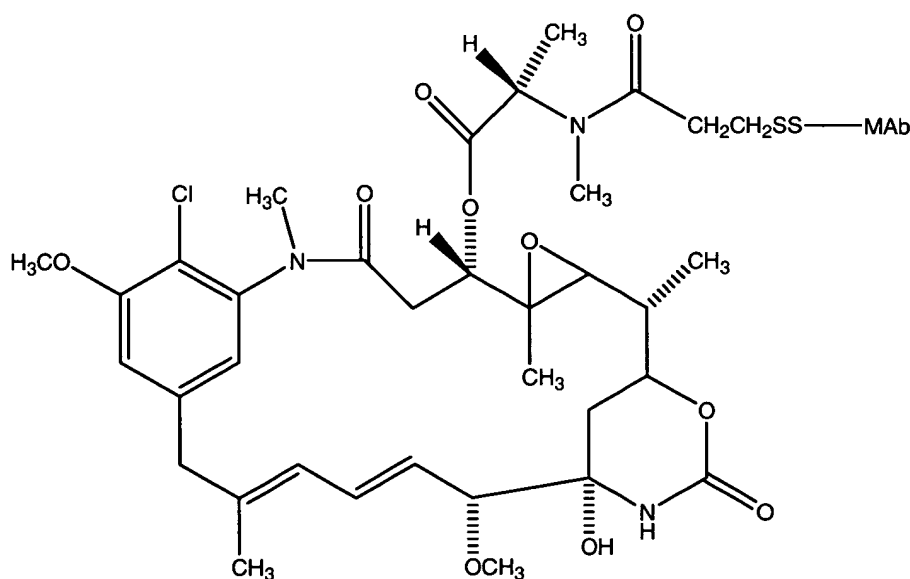


wherein MAb is a monoclonal antibody or fragment thereof that binds to an antigen expressed by the cancer cell.

118. (New) The kit of claim 106, wherein the immunoconjugate and chemotherapeutic agent are separate components in the kit.

119. (New) The kit of claim 106, wherein the immunoconjugate and chemotherapeutic agent are in the form of a composition in the kit.

120. (New) A kit comprising a synergistic combination of at least one chemotherapeutic agent selected from the group consisting of a taxane compound, an epothilone compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof; and at least one immunoconjugate represented by:



wherein MAb is a monoclonal antibody or fragment thereof that binds to an antigen expressed by the cancer cell.

121. (New) A method for treating cancer in a patient in need thereof comprising administering a therapeutically effective amount at least one chemotherapeutic agent and a therapeutically effective amount of at least one immunoconjugate; wherein the immunoconjugate comprises at least one maytansinoid compound linked to a monoclonal antibody or fragment thereof; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by a cancer cell.

122. (New) The method of claim 121, wherein the cancer is a cancer of the breast, colon, lung, prostate, kidney, pancreas, brain, bones, ovary, testes or a lymphatic organ; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by the breast cancer cell, the colon cancer cell, the lung cancer cell, the prostate cancer cell, the kidney cancer

cell, the pancreatic cancer cell, the brain cancer cell, the bone cancer cell, the ovarian cancer cell, the testicular cancer cell, or the lymphatic organ cancer cell, respectively.

123. (New) The method of claim 121, wherein the cancer is lung cancer; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by the lung cancer cell.

124. (New) The method of claim 121, wherein the lung cancer is a small cell lung cancer; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by the small cell lung cancer cell.

125. (New) The method of claim 121, wherein the cancer is colon cancer; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by the colon cancer cell.

126. (New) The method of claim 121, wherein the chemotherapeutic agent is a taxane compound, an epothilone compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof.

127. (New) The method of claim 121, wherein the chemotherapeutic agent is a taxane compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof.

81 128. (New) The method of claim 121, wherein the chemotherapeutic agent is paclitaxel, docetaxel, epothilone A, epothilone B, epothilone C, epothilone D, epothilone E, epothilone F, cisplatin, carboplatin, oxaliplatin, iproplatin, ormaplatin, tetraplatin, etoposide, teniposide, camptothecin, topotecan, irinotecan, 9-aminocamptothecin, or a mixture of two or more thereof.

129. (New) The method of claim 121, wherein the chemotherapeutic agent is paclitaxel, cisplatin, etoposide, docetaxel, topotecan, or a mixture of two or more thereof.

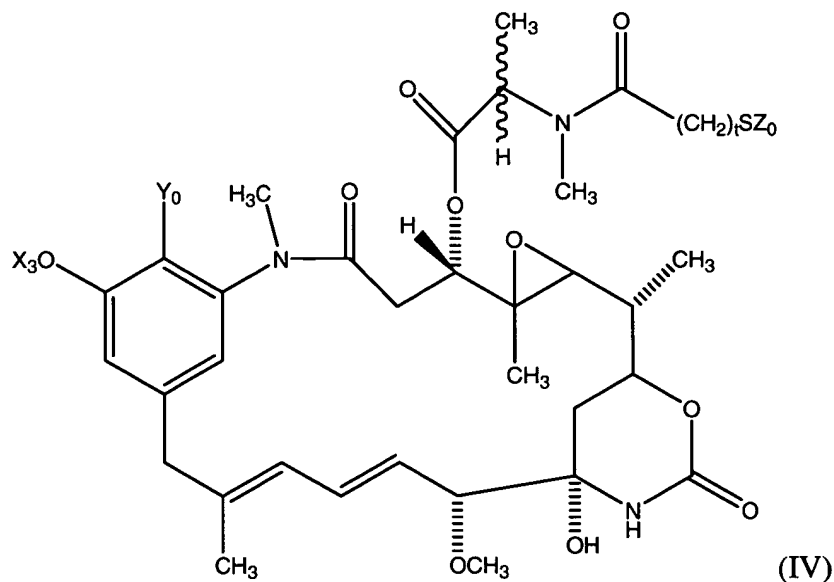
130. (New) The method of claim 121, wherein the monoclonal antibody or fragment thereof binds to a CD56 antigen.

131. (New) The method of claim 121, wherein the monoclonal antibody or fragment thereof is at least one of Fv, Fab, Fab' or F(ab')₂.

132. (New) The method of claim 121, wherein the monoclonal antibody or fragment thereof is humanized N901.

133. (New) The method of claim 121, wherein the monoclonal antibody or fragment thereof is humanized C242.

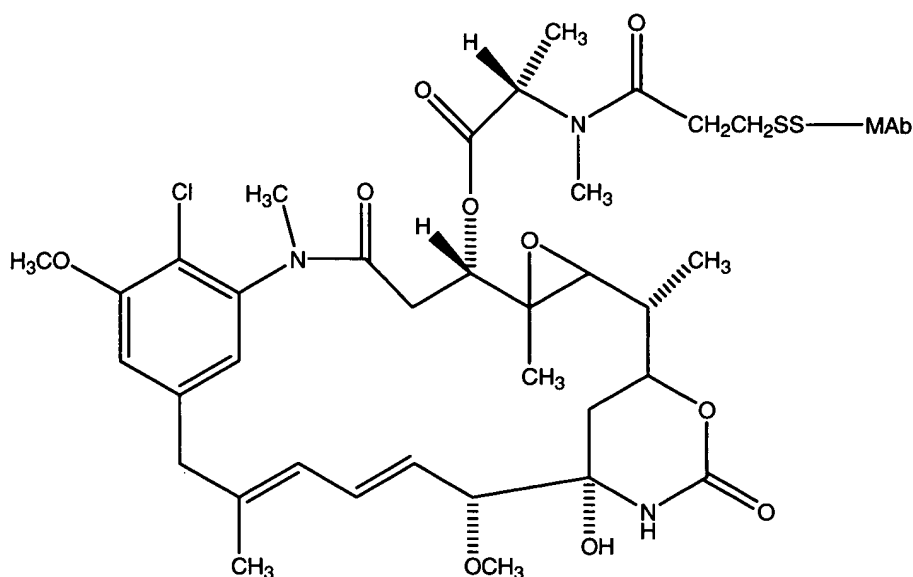
134. (New) The method of claim 121, wherein the immunoconjugate comprises at least one maytansinoid compound of formula (IV):



wherein Z_0 is H or SR; wherein R is methyl, linear alkyl, branched alkyl, cyclic alkyl, simple or substituted aryl or heterocyclic; t is 1, 2 or 3; Y_0 is chlorine or hydrogen; and X_3 is hydrogen or methyl.

135. (New) The method of claim 134, wherein Z_0 is H; t is 2; Y_0 is chlorine; and X_3 is methyl.

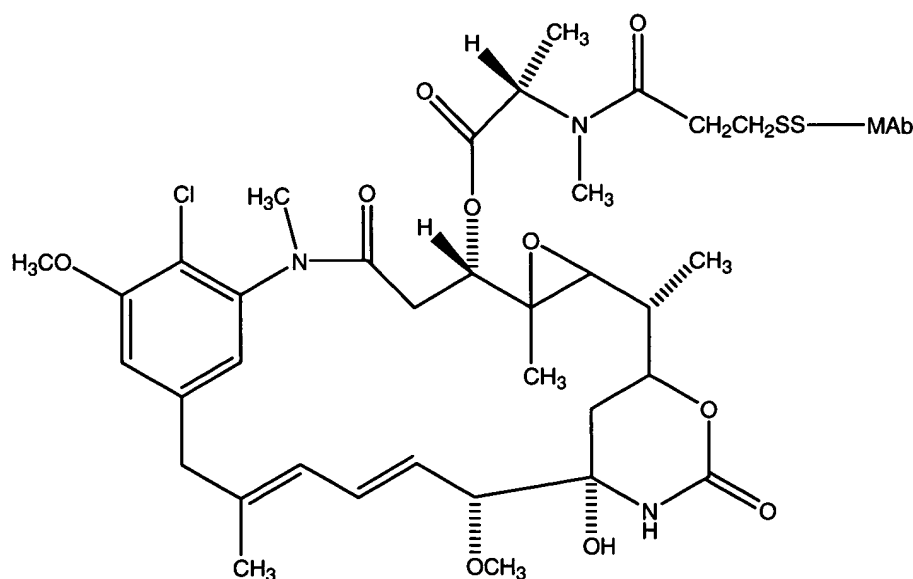
136. (New) The method of claim 121, wherein the immunoconjugate is:



wherein MAb is a monoclonal antibody or fragment thereof that binds to an antigen expressed by the cancer cell.

137. (New) The method of claim 121, wherein the chemotherapeutic agent and immunoconjugate are administered to the patient separately.

138. (New) A method for treating cancer in a patient in need thereof comprising parenterally administering a therapeutically effective amount of at least one chemotherapeutic agent selected from the group consisting of a taxane compound, an epothilone compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof; and at least one immunoconjugate represented by:



wherein MAb is a monoclonal antibody or fragment thereof that binds to an antigen expressed by the cancer cell.

139. (New) The method of claim 138, wherein the cancer is a cancer of the breast, colon, lung, prostate, kidney, pancreas, brain, bones, ovary, testes or a lymphatic organ; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by the breast cancer cell, the colon cancer cell, the lung cancer cell, the prostate cancer cell, the kidney cancer cell, the pancreatic cancer cell, the brain cancer cell, the bone cancer cell, the ovarian cancer cell, the testicular cancer cell, or the lymphatic organ cancer cell, respectively.

140. (New) The method of claim 138, wherein the cancer is lung cancer; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by the lung cancer cell.

81, 141. (New) The method of claim 138, wherein the lung cancer is a small cell lung cancer; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by the small cell lung cancer cell.

142. (New) The method of claim 138, wherein the cancer is colon cancer; and wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by the colon cancer cell.

143. (New) The method of claim 138, wherein the chemotherapeutic agent and immunoconjugate are administered to the patient separately.
